US ERA ARCHIVE DOCUMENT

TECHNICAL SUPPORT SECTION TOXICOLOGY REVIEW - I

Disinfectants Branch

IN 3/6/85 DOUT 4/17/85
James Com
Reviewed by James E. Wilson, Jr. Date 4/16/85
EPA Reg. No. or File Symbol 21164-I
EPA Petition or EUP No.
Date Division Received 2/4/85
Type Product(s): I, D, H, F, N, R, S
Data Accession No(s). 256703
Product Mgr. No. 32 (Castillo)
Product Name(s) Akta Klor 15
Company Name(s) Rio Linda Chemical Co., Inc.
Submission Purpose New Application
Chemical & Formulation Liquid
Active Ingredient(s):

Sodium Chlorite

15.0

BACKGROUND

This product will be used as a chlorine dioxide precursor for microbial control in water and wastewater.

RECOMMENDATIONS

The data submitted is adequate to place the product in toxicity category 3 for oral toxicity. The acute dermal and eye and skin irritation studies were not done due to the high pH.

LABELING

No changes required.

CRP STATUS

Special packaging is not required since the product is intended for industrial use.

DATA REVIEW

Report by Northview Pacific Laboratories, Inc., Submitted to Rio Linda Chemical Co., Inc., Sacramento, CA 95814, dated January 22, 1985. (Accession No. 256703).

Acute Oral

Method - Doses of 0.890, 1.000, 1.120, 1.200, 1.380, 1.420, 1.780, 2.240, 2.500 and 3.000 were fed to groups of rats. Animals were observed for 14 days. Body weights were taken on the day of dosing and weekly thereafter. Gross necropsy examinations were performed on all rats.

Results - The mortality chart appears below:

Dose (g/kg)	Mortality (M:F)
0.890 1.000 1.120 1.200 1.380 1.420 1.780	- :0/5 - :3/5 0/6:3/6 - :5/5 0/5:6/6 3/6:1/1 2/8:1/1
2.240 2.500 3.000	4/6:1/1 6/6: - 6/6: -

Signs of toxicity included diarrhea, lethargy, paleness and scruffy coat. Animals which survived but became ill showed loss of weight and appetite. Animals that died during the study had discolored lungs, fluid in the stomach, reddened or puffy intestines, dark and/or enlarged spleens and adrenals. The only abnormality seen in survivors was reddened lungs.

Conclusion -

The acute and oral LD50s are 1.800 (1.440-2.250) g/kg and 1.020 (0.872-1:193) g/kg for male and female rats respectively.